



# Montana Fish, Wildlife & Parks

## Brucellosis Project Update February 2013



One hundred elk were captured and tested for brucellosis between January 16<sup>th</sup> and 20<sup>th</sup> in the western Pioneer mountains (Figure 1). All 100 elk tested seronegative for *Brucella abortus* exposure. Thirty elk were outfitted with GPS radiocollars (Table 1).

All 11 previously captured and marked seropositive elk in the Ruby and Sage Creek areas were recaptured on January 21<sup>st</sup>. One of these seropositive elk died during capture leaving 10 remaining seropositive, radiocollared elk in the study. Seven of these 10 elk were pregnant during capture and were fitted with Vaginal Implant Transmitters (VITs), which are currently being monitored 2-3 times each week. The VITs emit a radio signal that will indicate if an abortion or birth event has occurred and help ground crews locate the birth or abortion site. Tissue and environmental samples collected at birth or abortion sites will be tested to determine if the *Brucella* bacteria is present.



Julee Shamhart and pilot Trevor Throop conducted a telemetry flight on Saturday February 2<sup>nd</sup> and located 29 of the 30 radiocollared seronegative elk (Figure 2) and 9 of the 10 seropositive elk (Figure 3). One seronegative elk was not heard during the flight. One seropositive elk that is not pregnant is now wintering on the Wall Creek winter range. This animal is being ground-tracked and we last monitored her by vehicle on February 12, 2013.

Julee Shamhart  
Conservation Technician  
Dillon, MT  
406-925-9545  
[JShamhart@mt.gov](mailto:JShamhart@mt.gov)



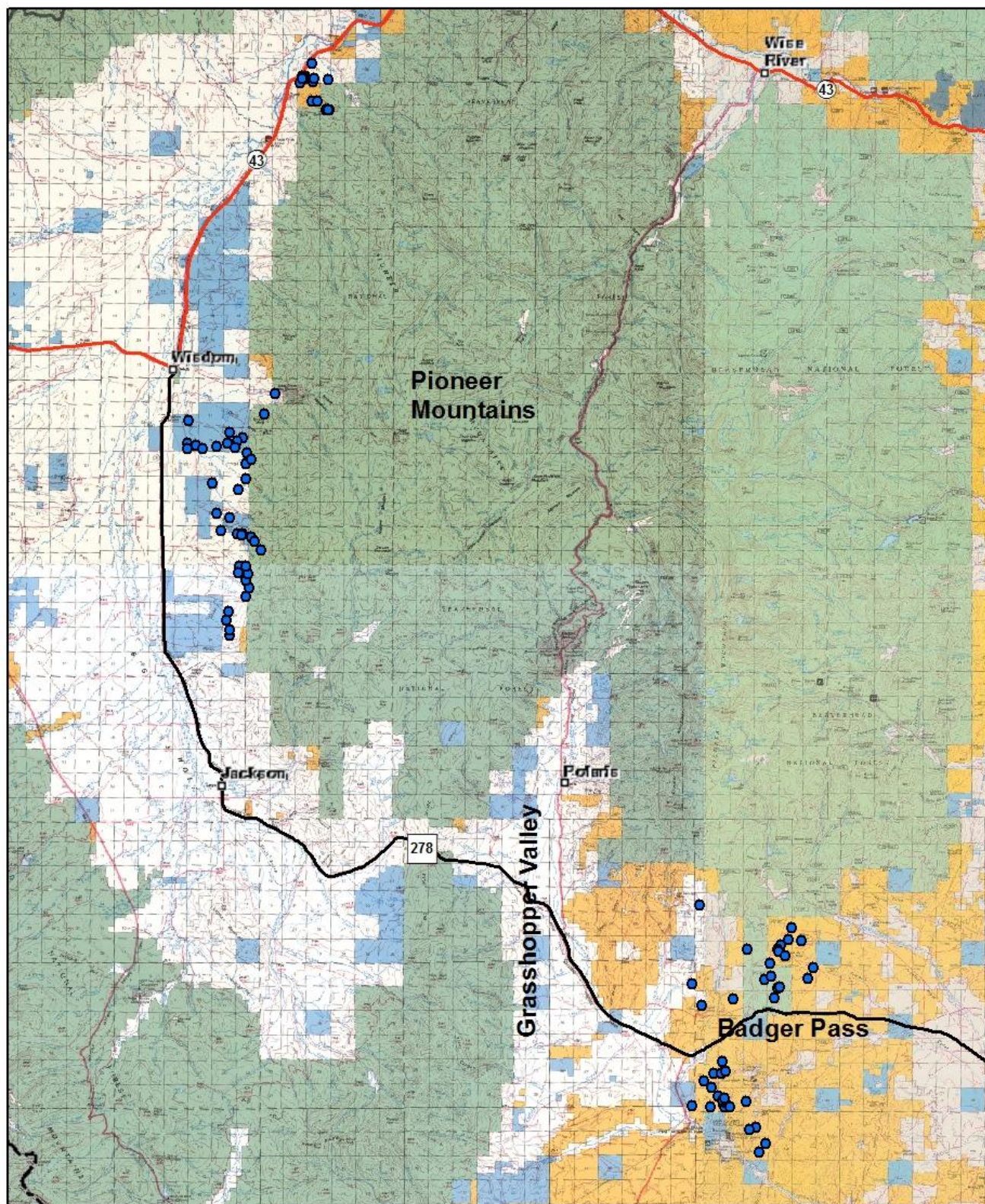


Figure 1. Capture locations of 100 elk captured and tested for brucellosis in January 2013. All 100 elk tested seronegative for exposure to brucellosis.

**Table 1. All 40 elk currently radiocollared in the brucellosis study area. Thirty elk were radiocollared in each of the past 3 years and all seropositive elk will remain collared for the duration of the study.**

<b>Field ID #</b>	<b>Capture Area</b>	<b>First capture year</b>	<b>Serostatus</b>	<b>Pregnancy status (2013)</b>	<b>Most recent location</b>
1	Ruby	2011	Positive	Pregnant	Spring Brook
3	Ruby	2011	Positive	Pregnant	Spring Brook
7	Ruby	2011	Positive	Pregnant	Spring Brook
9	Ruby	2011	Positive	Pregnant	Spring Brook
11	Ruby	2011	Positive	Open	Timber Hill
12	Ruby	2011	Positive	Open	Wall Creek WMA
15	Little Basin Cr/ Sage	2012	Positive	Pregnant	Timber Hill
17	Little Basin Cr/ Sage	2012	Positive	Open	Vinegar Hill
21	Little Basin Cr/ Sage	2012	Positive	Pregnant	Vinegar Hill
124	Little Basin Cr/ Sage	2012	Positive	Pregnant	Vinegar Hill
202	Pioneers	2013	Negative		Goris Gulch/BLM
203	Pioneers	2013	Negative		Bannack/ BLM
206	Pioneers	2013	Negative		Bannack/ BLM
213	Pioneers	2013	Negative		Clara Mine/ USFS
219	Pioneers	2013	Negative		McVey Creek/ USFS
222	Pioneers	2013	Negative		Clara Mine/ USFS
223	Pioneers	2013	Negative		Fox Gulch/ USFS
225	Pioneers	2013	Negative		Bannack/ BLM
230	Pioneers	2013	Negative		Clara Mine/ USFS
234	Pioneers	2013	Negative		Clara Mine/ USFS
240	Pioneers	2013	Negative		Deer Peak/ USFS
241	Pioneers	2013	Negative		Goris Gulch/BLM
242	Pioneers	2013	Negative		Bannack/ BLM
245	Pioneers	2013	Negative		Old Faithful Mine
261	Pioneers	2013	Negative		Kelley Reserv/ USFS
262	Pioneers	2013	Negative		Kelley Reserv/ USFS
263	Pioneers	2013	Negative		Not Heard
266	Pioneers	2013	Negative		Clara Mine/ USFS
267	Pioneers	2013	Negative		Clara Mine/ USFS
269	Pioneers	2013	Negative		Bannack/ BLM
270	Pioneers	2013	Negative		Clara Mine/ USFS
275	Pioneers	2013	Negative		Clara Mine/ USFS
276	Pioneers	2013	Negative		Clara Mine/ USFS
278	Pioneers	2013	Negative		Bannack/ BLM
280	Pioneers	2013	Negative		Fox Gulch/ USFS
284	Pioneers	2013	Negative		Bannack/ BLM
288	Pioneers	2013	Negative		Bannack/ BLM
294	Pioneers	2013	Negative		Clara Mine/ USFS
295	Pioneers	2013	Negative		Goris Gulch/BLM
298	Pioneers	2013	Negative		Goris Gulch/BLM



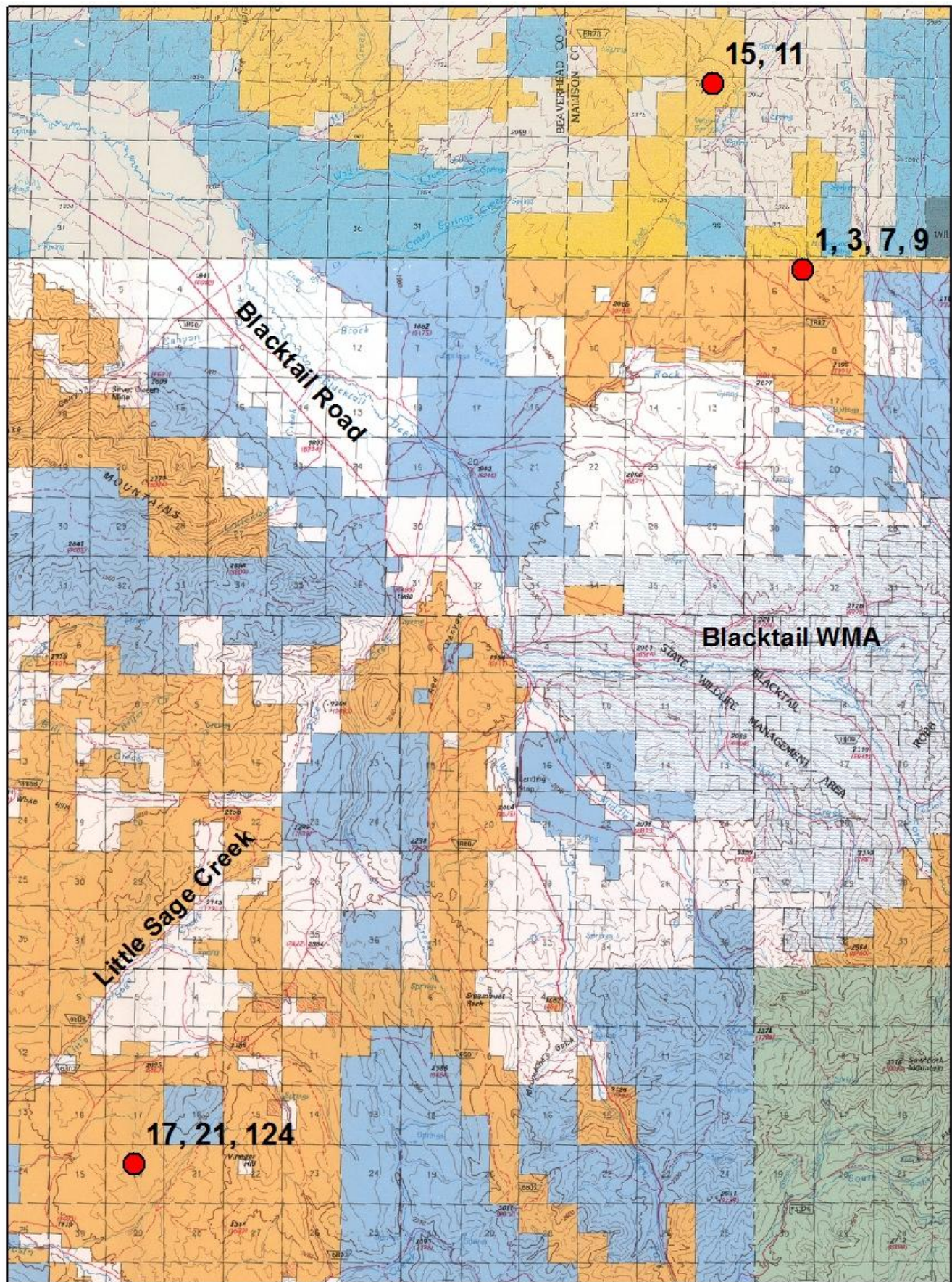


Figure 2. Seropositive elk locations from the February 2, 2013 monitoring flight.



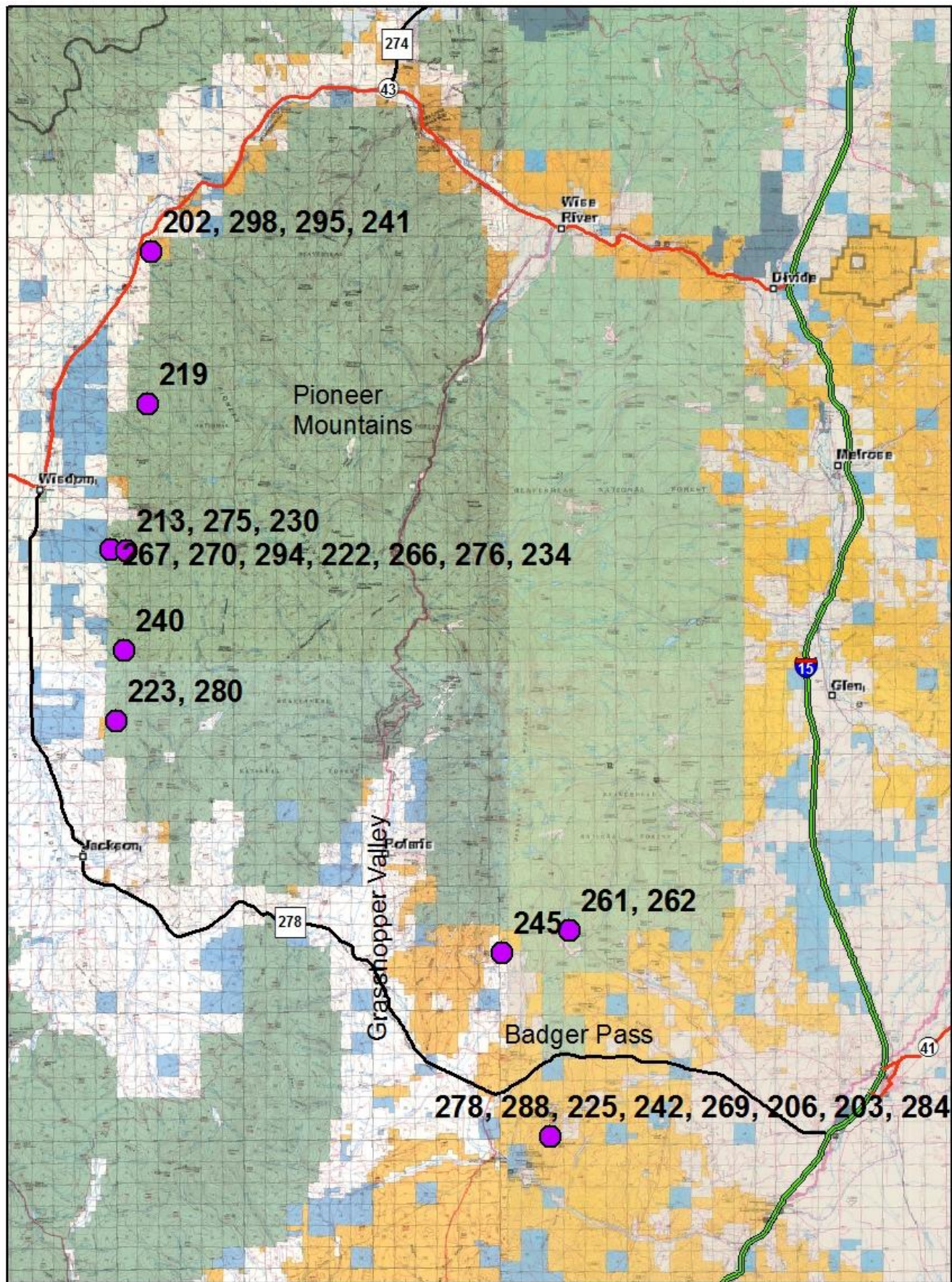


Figure 3. Seronegative elk locations from the February 2, 2013 monitoring flight.